THE MODERN PRACTICE OF ADULT EDUCATION

From Pedagogy to Andragogy

REVISED AND UPDATED

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4 What Is Andragogy?

In the Beginning Was Pedagogy

Until recently there was only one model of assumptions about learning and the characteristics of learners on which educators could base their curricula and teaching practices. It evolved in the monastic schools of Europe between the seventh and twelfth centuries and came to dominate secular schools when they were organized in the twelfth century and universities when they began emerging, first in Bologna and Paris, toward the close of the twelfth century. This was the model of pedagogy—a term derived from the Greek words paid (meaning "child") and agogus (meaning "leading"). So "pedagogy" means, literally, the art and science of teaching children.

The pedagogical assumptions about learning and learners were, therefore, based initially on observations by the monks in teaching very young children relatively simple skills—originally mostly reading and writing. With the spread of elementary schools throughout Europe and North America—and much of the rest of the world, especially by missionaries—in the eighteenth and nineteenth centuries this model was adopted and reinforced. And when educational psychologists started scientifically studying learning around the turn of the twentieth century they further contributed to the enthronement of the pedagogical model by limiting their research mostly to the reactions of children and animals to didactic teaching. In fact, as we shall see later, we didn't get much knowledge about *learning* (in contrast to reactions to teaching) until studies on adult learning began to appear after World War II.

When adult education began to be organized systematically during the 1920s, teachers of adults began experiencing several problems with the pedagogical model.

One problem was that pedagogy was premised on a conception of the purpose of education—namely, the transmittal of knowledge and skills that had stood the test of time—that adult learners seemed to sense was insufficient. Accordingly, their teachers found them to be resistant frequently to the strategies that pedagogy prescribed, including fact-laden lectures, assigned readings, drill, quizzes, rote memorizing, and examinations. Adults appeared to want something more than this, and drop-out rates were high.

Although the teachers were not aware of it, one of the great philosophers of this century, Alfred North Whitehead, was suggesting what was wrong. In an obscure footnote he pointed out that it was appropriate to define education as a process of transmittal of what is known only when the time-span of major cultural change was greater than the life-span of individuals. Under this condition, what people learn in their youth will remain valid and useful for the rest of their lives. But, Whitehead

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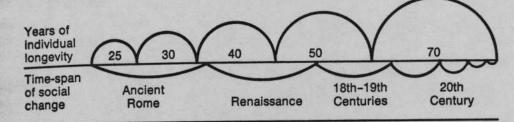
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emphasized, "We are living in the first period in human history for which this assumption is false . . . today this time-span is considerably shorter than that of human life, and accordingly our training must prepare individuals to face a novelty of conditions." An attempt is made in Exhibit 3 to portray Whitehead's concept graphically.

Exhibit 3

THE RELATIONSHIP OF THE TIME-SPAN OF SOCIAL CHANGE TO INDIVIDUAL LIFE-SPAN



Note that up to the early part of the twentieth century the time-span of major cultural change (e.g., massive inputs of new knowledge, technological innovation, vocational displacement, population mobility, change in political and economic systems, etc.) extended over several generations, whereas in the twentieth century several cultural revolutions have already occurred and the pace is accelerating. Under this new condition, knowledge gained at any point of time is largely obsolete within a matter of years; and skills that made people productive in their twenties become out-of-date in their thirties. So it is no longer functional to define education as a process of transmitting what is known; it must now be defined as a lifelong process of continuing inquiry. And so the most important learning of all—for both children and adults—is learning how to learn, the skills of self-directed inquiry.

Another problem the teachers of adults experienced with the pedagogical model was that many of the assumptions about the characteristics of learners did not seem to fit their adult students. And so they began experimenting with different assumptions and found out that they often produced better results.

Then Came Andragogy

Between 1929 and 1948 the Journal of Adult Education, published by the American Association for Adult Education, carried articles by successful teachers of adults² describing ways in which they were treating adults that deviated from the pedagogical model. Frequently the authors of these articles expressed a sense of guilt for violating academic standards (such as substituting interviews for quizzes). Obviously, they were feeling guilty because they had no theory to support their practices; they were simply being pragmatic and following their intuitions.

During the 1950s there began appearing books which analyzed these teachers' reports and extracted principles that were common to them-my first book, Informal

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'Alfred N. Whitehead, "Introduction," Wallace B. Donham, Business Adritt (New York: McGraw-Hill Book

Co., 1931), pp. viii-xix.

*"Successful teachers of adults" is operationally defined as teachers who can retain their students; note that this is not a criterion of success for teachers of children under compulsory attendance.

Adult Education, published in 1950, was just such a listing of principles, but it made no attempt to envelop them in a unifying theory.

Then, in the 1960s, we began getting findings from scientifically designed research that focused on the internal processes of adult learning. The seminal study that launched this direction of movement was Cyril O. Houle's *The Inquiring Mind*, published by the University of Wisconsin Press in 1961. Houle found, through in-depth interviews with twenty-two "continuing learners," that his subjects fell into three subgroups:

The first, . . . the goal-oriented, are those who use education as a means of accomplishing fairly clear-cut objectives. The second, the activity-oriented, are those who take part because they find in the circumstances of the learning a meaning which has no necessary connection, and often no connection at all, with the content or the announced purposes of the activity. The third, the learning-oriented, seek knowledge for its own sake. These are not pure types; the best way to represent them pictorially would be by three circles which overlap their edges. But the central emphasis of each subgroup is clearly discernible.³

One of Houle's students, Allen Tough, extended this line of investigation from his position on the faculty of the Ontario Institute for Studies in Education later in the same decade. Tough's research question was, paraphrased: "How do adults learn naturally—when they are not being taught." His first findings, reported in two reports, Learning Without a Teacher (1967) and The Adult's Learning Projects (1971), showed that 1) almost all adults engage in from one to twenty major learning projects each year—with the average number being around eight; 2) only about 10 percent of the learning projects were associated with educational institutions; 3) there is a fairly universal "natural" process of learning—adults who undertake to learn something on their own go through a similar sequence of steps; 4) adults almost always turn to somebody for help at one or more points in this sequence; 5) usually they go to "helpers" who have not been trained as teachers, but frequently when they go to teachers the teachers interfere with their learning by substituting their own pedagogical sequence of steps rather than flowing with the learners' natural sequence.

A great deal of other knowledge about adult learning was accumulating during the sixties from related disciplines—clinical psychology, developmental psychology (especially the new group of life-spań developmental psychologists), gerontology, sociology, and anthropology—both in North America and Europe. By and large, this research-based knowledge supported the intuitions of the earlier teachers, and theorists began fitting the knowledge drawn from both sources into a comprehensive, coherent

theory of adult learning.

Early in this process European adult educators felt the need for a label for this new theoretical model that would enable them to talk about it in parallel with pedagogy. They coined the label "andragogy," which is based on the Greek word anēr (with the stem andr-), meaning "man, not boy" or adult. I first learned of the new label from a Yugoslavian adult educator in the mid-sixties and used it in an article in Adult Leadership in 1968. Since that time it has appeared with increasing frequency in the literature around the world, and presumably will be listed in the standard dictionaries before long.⁴

³Cyril O. Houle, The Inquiring Mind (Madison, Wis.: University of Wisconsin Press, 1961), pp. 15–16.
4For a detailed description of the evolution of the term "andragogy," see my The Adult Learner: A Neglected Species (Houston: Gulf Publishing Co., 2nd ed., 1978), pp. 48–51; and for further elaboration on the etymology of "andragogy" see the correspondence between the author and the publishers of Merriam-Webster dictionaries in Appendix A.

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Originally I defined andragogy as the art and science of helping adults learn, in contrast to pedagogy as the art and science of teaching children. Then an increasing number of teachers in elementary and secondary schools (and a few in colleges) began reporting to me that they were experimenting with applying the concepts of andragogy to the education of youth and finding that in certain situations they were producing superior learning. So I am at the point now of seeing that andragogy is simply another model of assumptions about learners to be used alongside the pedagogical model of assumptions, thereby providing two alternative models for testing out the assumptions as to their "fit" with particular situations. Furthermore, the models are probably most useful when seen not as dichotomous but rather as two ends of a spectrum, with a realistic assumption in a given situation falling in between the two ends. For example, taking the assumption regarding dependency versus self-directedness, a six-year-old may be highly self-directing in learning the rules of a game but quite dependent in learning to use a calculator; on the other hand, a forty-year-old may be very dependent in learning to program a computer but completely self-directing in learning to repair a piece of furniture. As I see it, whenever a pedagogical assumption is the realistic one, then pedagogical strategies are appropriate, regardless of the age of the learner-and vice versa. But I would like to make one caveat: an ideological pedagogue—one who has a deep loyalty and commitment to the pedagogical model-may be tempted to underrate the extent to which an andragogical assumption may be realistic and may, for example, want to keep a learner dependent long after the learner has become able to be self-directing.

Assumptions of Pedagogy and Andragogy

Exhibit 4 portrays how I see the difference in assumptions between the two models:

Exhibit 4

A COMPARISON OF THE ASSUMPTIONS OF PEDAGOGY AND ANDRAGOGY

Pedagogy

Regarding:	
Concept of the learner	

The role of the learner is, by definition, a dependent one. The teacher is expected by society to take full responsibility for determining what is to be learned, when it is to be learned. how it is to be learned, and if it has been learned.

Andragogy

It is a normal aspect of the process of maturation for a person to move from dependency toward increasing selfdirectedness, but at different rates for different people and in different dimensions of life. Teachers have a responsibility to encourage and nurture this movement. Adults have a deep psychological need to be generally self-directing, although they may be dependent in particular temporary situations.

Regarding:

Role of

learners' experience

Pedagogy

presentations.

The experience learners bring to a learning situation is of little worth. It may be used as a

starting point, but the experience from which learners will gain the most is that of the teacher, the textbook writer, the audiovisual aid producer, and other experts. Accordingly, the primary techniques in education are transmittal techniques-lecture, assigned reading, AV

Andragogy

As people grow and develop they accumulate an increasing reservoir of experience that becomes an increasingly rich resource for learning-for themselves and for others. Furthermore, people attach more meaning to learnings they gain

from experience than those they acquire passively. Accordingly, the primary techniques in education are experiential techniques—laboratory experiments, discussion, problem-solving cases, simulation exercises, field experience, and the like.

Readiness to learn

People are ready to learn whatever society (especially the school) says they ought to learn, provided the pressures on them (like fear of failure) are great enough. Most people of the same age are ready to learn the same things. Therefore, learning should be organized into a fairly standardized curriculum, with a uniform step-by-step progression for all learners.

People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems. The educator has a responsibility to create conditions and provide tools and procedures for helping learners discover their "needs to know." And learning programs should be organized around life-application categories and sequenced according to the learners' readiness to learn.

Orientation to learning

Learners see education as a process of acquiring subjectmatter content, most of which they understand will be useful only at a later time in life. Accordingly, the curriculum should be organized into subjectmatter units (e.g., courses) which follow the logic of the subject (e.g., from ancient to modern history, from simple to complex mathematics or science). People are subject-centered in their orientation to learning.

Learners see education as a process of developing increased competence to achieve their full potential in life. They want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. Accordingly, learning experiences should be organized around competency-development categories. People are performance-centered in their orientation to learning.

To summarize, andragogy is premised on at least these four crucial assumptions about the characteristics of learners that are different from the assumptions on which traditional pedagogy is premised. These assumptions are that as individuals mature: 1) their self-concept moves from one of being a dependent personality toward being a

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self-directed human being; 2) they accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning; 3) their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles; and 4) their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance-centeredness.

Some Implications of the Assumptions for Practice

I would like to explore these assumptions a little more fully and suggest some of their implications for educational practice.

Self-Concepts and Teachers' Concepts of Learners

Children enter this world in a condition of complete dependency. Their needs, except for purely biological functions, must be taken care of by someone else. The first image children get of themselves as separate entities is that of dependent personalities whose lives are managed for them by the adult world. At home, often at play, in church, in the community, and in school, they expect the will of adults to be imposed on them. That is what life is like when you are a kid.

This self-concept of dependency is encouraged and reinforced by the adult world. In fact, society defines the appropriate role of children as that of learners; this is their full-time occupation, the source of their rewards and self-fulfillment. And on the whole, this role is defined as the more or less passive one of receiving and storing up the information adults have decided children should have.

As children's self-identities begin to take shape, they begin to see themselves as having the capacity to start making decisions for themselves, at first experimentally and in small matters that do not impinge on the adult world. But increasingly, as they mature, children's self-concepts move in the direction of greater self-direction, and during adolescence their need to take significant responsibility for managing their own lives becomes so strong that it often puts them in open rebellion against control by the adult world. The tragedy is that in our culture the adult world tends to hold onto its concept of the child as a dependent personality until the last possible moment.

Although this cultural lag between children's capacity to take responsibility and the freedom the adult world allows them to take responsibility applies to almost all aspects of their lives, it is especially evident in regard to their education. Interestingly, in the kindergarten and early primary years our teachers typically involve students in planning and conducting learning activities to a considerable degree. But as children move up the educational ladder, they encounter more and more of the responsibility for their learning being taken by the teachers, the curriculum planner, and their parents. The net effect is to freeze them into self-concepts of dependency.

But something dramatic happens to their self-concepts when people define themselves as adults. They begin to see their normal role in life no longer as being full-time learners. They see themselves increasingly as producers or doers. Their chief sources of self-fulfillment are now their performances as workers, spouses, parents, and citizens. Adults acquire a new status, in their own eyes and in the eyes of others, from these noneducational responsibilities. Their self-concept becomes that of a self-directing personality. They see themselves as being able to make their own decisions and face the

consequences, to manage their own lives. In fact, the psychological definition of adult-hood is the point at which individuals perceive themselves to be essentially self-directing. And at this point people also develop a deep psychological need to be seen by

others as being self-directing.

This fact presents a special problem to teachers of adults. Adults have been so deeply conditioned by their previous schooling (under the pedagogical model) to perceive the appropriate role of learner to be that of a dependent, more or less passive recipient of transmitted content, that even though they may be completely self-directing in all other aspects of their lives, the minute they enter into any activity labeled "education," they sit back, fold their arms, and say, "Teach me." The problem arises when teachers take this stance at face value and start treating adult learners as if they were dependent personalities, for this induces an inner conflict within the adults between this preconditioned intellectual model of the role of learner and the adults' deep psychological need to be self-directing. Hence there is the need to build into our program designs some preparatory experiences that will help adults get a new way of thinking about the role of learner and some new skills in self-directed learning.

Often there is another ingredient in the self-concept of adults that affects their role as learners. They may carry over from their previous experience with schooling the perception that they are not very smart, at least in regard to academic work. This fact about the adult psyche has several consequences for adult education. In the case of some adults the remembrance of the classroom as a place where one is treated with disrespect and may fail is so strong that it serves as a serious barrier to their becoming involved in adult-education activities at all. This barrier can be reduced by interpreting adult learning activities as being different and enjoyable and perhaps by having the meetings in nonacademic locations. In the case of other adults, simply providing them with some early success experiences that will help them build positive self-concepts as learners will be sufficient.

Fortunately, once adults make the discovery that they can take responsibility for their own learning, as they do for other facets of their lives, they experience a sense of release and exhilaration. They then enter into learning with deep ego-involvement, with results that are frequently startling both to themselves and to their teachers. Teachers who have helped their adult students to achieve this breakthrough report repeatedly that it is one of the most rewarding experiences of their lives.

Implications for Practice

Several implications for practice flow from this difference in assumptions about learners.

1. The learning climate. The self-concept of being an adult has several consequences regarding the requirements of an environment that will be conducive to adult learning. It suggests that the physical environment should be one in which adults feel at ease. Furnishings and equipment should be adult-sized and comfortable; meeting rooms should be arranged informally and should be decorated according to adult tastes; and acoustics and lighting should take into account declining audiovisual acuity.

⁵My Self-Directed Learning: A Guide for Learners and Teachers (Chicago: Association Press/Follett, 1975) was written as a resource for this purpose.

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Even more importantly, the psychological climate should be one which causes adults to feel accepted, respected, and supported; in which there exists a spirit of mutuality between teachers and students as joint inquirers; in which there is freedom of expression without fear of punishment or ridicule. People tend to feel more "adult" in an atmosphere that is friendly and informal, in which they are known by name and valued as unique individuals, than in the traditional school atmosphere of formality, semianonymity, and status differentiation between teacher and student.

In andragogical practice, care is taken to determine what are the symbols of childishness to particular groups of adults, and to remove them. For some-particularly undereducated adults-it is a school building, in which case social-agency facilities, churches, commercial properties, or living rooms would probably be environments more conducive to learning. For others a podium on a stage makes them feel that they are being talked down to, in which case a small table on the floor would provide a more appropriate work space for the teacher. Many adults associate rooms in which chairs are placed in rows with childhood regimentation and passivity, and find rooms in which participants are seated in small groups in circles or around tables more conducive to adult-type relationships. A few adults report that chalkboards are a symbol of childishness to them, which may help to explain the growing popularity in adult education of newsprint-pads on easels.

The behavior of the teacher probably influences the character of the learning climate more than any other single factor, however. Teachers convey in many ways whether their attitude is one of interest in and respect for the students or whether they see the students essentially as receiving sets for transmissions of wisdom. Teachers who take the time and trouble to get to know their students individually and who call them by name (especially by first name) obviously convey the first set of attitudes. But probably the behavior that most explicitly demonstrates that a teacher really cares about students and respects their contributions is the act of really listening to what the

students say.

The notion of a climate of adultness can be extended beyond individual classrooms and applied to total institutions. Indeed, such a climate is likely to be established in classrooms if it pervades the whole institution and is reflected in its architecture, decor, policies, procedures, leadership style, and human relations. One can sense rather quickly on entering an institution, for example, whether it cares more about people or things, whether it is concerned about the feelings and welfare of individuals or herds them through like cattle, and whether it views adults as dependent personalities or self-directing human beings.

2. Diagnosis of needs. The adult's self-concept of self-directivity is in direct conflict with the traditional practice of the teacher telling the students what they need to learn. Indeed it is even in conflict with the social philosophy that society has a right to impose its ideas about what they need to learn on them. Of course, adults will learn what others want them to learn if their power to punish them for not learning is strong enough. But they are more deeply motivated to learn those things they see the need to

In andragogy, therefore, great emphasis is placed on the involvement of adult learners in a process of self-diagnosis of needs for learning. As will be described in greater detail in Chapter 11, this process consists of three phases: 1) constructing a model of the competencies or characteristics required to achieve a given ideal model of performance, so that the learner has some vision of the "good" supervisor, the "good" public speaker, the "good" parent, and the like—and of the competencies required to become "good." It is in this model-building phase that the values and expectations of the teacher, the institution, and society are amalgamated with those of the learner into a composite picture; 2) providing diagnostic experiences in which the learners can assess their present level of competencies in the light of those portrayed in the model; this is an underdeveloped area of andragogical technology, but one in which there is currently a ferment of invention. Such techniques as critical incident processes, sociodrama, computerized games, laboratory methods, and simulation exercises are being developed to enable learners to perform and then to get feedback that helps them in objectively assessing the strengths and weaknesses of their performance; 3) helping the learners to measure the gaps between their present competencies and those required by the model, so that they experience a feeling of dissatisfaction about the distance between where they are and where they would like to be, and so are able to identify specific directions of desirable growth. This experiencing of self-induced dissatisfaction with present inadequacies, coupled with a clear sense of direction for self-improvement, is in fact a good definition of "motivation to learn."

3. The planning process. There seems to be a law (or, at least, a tendency) of human nature that goes like this: human beings tend to feel committed to a decision (or an activity) to the extent that they have participated in making it (or planning it). Teachers of adults who do all the planning for their students, who come into the classroom and impose preplanned activities on them, typically experience apathy, resentment, and probably withdrawal. This imposition of the will of the teacher is incongruent with the adult's self-concept of self-directivity.

Accordingly, a basic element in the technology of andragogy is the involvement of the learners in the process of planning their own learning, with the teacher serving as a procedural guide and content resource. When the number of students is small enough, they can all be involved in the planning directly; when the number gets much over thirty, adult educators make use of representative councils, committees, task forces, teams, or other devices through which the learners feel that they are participating in the planning by proxy.

The function of planning, with which the remainder of this book is largely concerned, consists of translating diagnosed needs into specific educational objectives (or directions of growth), designing and conducting learning experiences to achieve these objectives, and evaluating the extent to which these objectives have been accomplished. In andragogy, responsibility for performing this function is a mutual one between the learners and the teacher.

4. Conducting learning experiences. In traditional pedagogical practice (and in contemporary programmed instruction) the function of the teacher is defined as "to teach." The teacher is expected to take full responsibility for what happens in the teaching-learning transaction. The learner's role tends to be that of a fairly passive recipient of the teacher's instruction.

In contrast, in congruence with the adult's self-concept of self-directivity, andragogical practice treats the learning-teaching transaction as the mutual responsibility of learners and teacher. In fact, the teacher's role is redefined as that of a procedural technician, resource person, and coinquirer; more a catalyst than an instructor, more a guide than a wizard. Andragogy assumes that a teacher cannot really "teach" in the sense of "make a person learn," but that one person can only *help* another person learn. (In my own practice, when I succumb to the compulsion to teach my students something I know they ought to know but that they do not yet know they ought to

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Later chapters describe procedures by which learners can responsibly share in taking responsibility for their own learning. Suffice it to say at this point that an andragogical learning situation, whether it be a course, an institute, a training program, or a conference, is alive with meetings of small groups—planning committees, learning-teaching teams, consultation groups, project task forces—sharing responsibility for helping one another learn.

5. Evaluation of learning. Probably the crowning instance of incongruity between traditional educational practice and the adult's self-concept of self-directivity is the act of a teacher giving a grade to a student. Nothing makes an adult feel more childlike than being judged by another adult; it is the ultimate sign of disrespect and dependency, as the one who is being judged experiences it.

For this reason, andragogical theory prescribes a process of self-evaluation, in which the teacher devotes energy to helping the adults get evidence for themselves about the progress they are making toward their educational goals. In this process, the strengths and weaknesses of the educational program itself must be assessed in terms of how it has facilitated or inhibited the learning of the students. So evaluation is a mutual

undertaking, as are all other phases of the adult learning experience.

In fact, what is happening in practice is that precisely the same procedures that are used for the diagnosis of learning needs are being employed to help the learners measure gains in competence. For instance, by comparing their performance in solving a critical incident at the end of a learning experience with their performance in a similar critical incident at the beginning of the experience, learners can quite precisely measure the changes produced by the experience. Because of the similarity of these two processes, I find myself now thinking less and less in terms of the evaluation of learning and more and more in terms of the rediagnosis of learning needs. And I find that, when my adult students perceive what they do at the end of a learning experience as rediagnosing rather than evaluating, they enter into the activity with more enthusiasm and see it as being more constructive. Indeed, many of them report that it launches them into a new cycle of learning, reinforcing the notion that learning is a continuing process.

This shift from evaluation to self-evaluation or rediagnosis places a heavy burden on teachers of adults. They must set the example of being open to feedback regarding their performance. They must be skillful in establishing a supportive climate in which hard-to-accept information about one's performance can be looked at objectively. And they must be creative about inventing ways in which students can get comprehensive data about their own performance. Some of the techniques available in carrying this

burden are explored in later chapters.

My own feeling is that the single most critical difference between children and adults as learners is the difference in assumptions we make about their self-concepts, and this is why these assumptions and their technological implications have been dealt with in such detail. But there are other important differences.

The Role of Experience

Adults enter into any undertaking with a different background of experience from that of their youth. Having lived longer, they have accumulated a greater volume of

experience. But they have also had different kinds of experience. Children have not had the experience of making their own living, marrying, having children, taking real community responsibility, or being responsible for the welfare of others (although they have observed all these things in their families and on television!).

There is, it seems to me, another subtle difference between children and adults as regards their experience. To children, experience is something that happens to them; it is an external event that affects them, not an integral part of them. If you ask children who they are, they are likely to identify themselves in terms of who their parents are, who their older brothers and sisters are, where they live, and what school they attend. Their self-identity is largely derived from external sources.

But adults derive their self-indentity from their experience. They define who they are in terms of the accumulation of their unique sets of experience. So if you ask adults who they are, they are likely to identify themselves by describing what their occupations are, where they have worked, where they have traveled, what their training and

are what they have done.

Because adults define themselves largely by their experience, they have a deep investment in its value. And so when they find themselves in situations in which their experience is not being used, or its worth is minimized, it is not just their experience

experience have equipped them to do, and what their achievements have been. Adults

that is being rejected—they feel rejected as persons.

These differences in experience between children and adults have at least three consequences for learning: 1) adults have more to contribute to the learning of others; for most kinds of learning they are themselves a rich resource for learning; 2) adults have a richer foundation of experience to which to relate new experiences (and new learnings tend to take on meaning as we are able to relate them to our past experience); 3) adults have acquired a larger number of fixed habits and patterns of thought, and therefore tend to be less open-minded.

Implications for Practice

Several implications for practice flow from these differences in experience.

1. Emphasis on experiential techniques. Because adults are themselves richer resources for learning than is true of children, greater emphasis can be placed on techniques that tap the experience of the adult learners, such as group discussion, the case method, the critical-incident process, simulation exercises, role playing, skill-practice exercises, field projects, action projects, laboratory methods, consultative supervision, demonstration, seminars, work conferences, counseling, group therapy, and community development. There is a distinct shift in emphasis in andragogy away from the transmittal techniques so prevalent in youth education—the lecture, assigned readings, and canned audiovisual presentation—toward the more participatory experiential techniques. Indeed, "participation" and "ego-involvement" are boldfaced words in the lexicon of the adult educator, with the assumption often being made that the more active the learner's role in the process, the more they are probably learning.

2. Emphasis on practical application. Skillful adult educators have always taken care to see that new concepts or broad generalizations were illustrated by life experiences drawn from the learners. But numerous recent studies on the transfer of learning and the maintenance of behavioral change indicate the desirability of going even further, and actually building into the design of learning experiences provision for the learners to plan—and even rehearse—how they are going to apply their learnings to their day-to-day lives.

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always taken care to by life experiences sfer of learning and going even further, sion for the learners urnings to their day3. Unfreezing and learning to learn from experience. A growing andragogical practice is to build into the early phases of a course, workshop, conference, institute, or other sequential educational activity an "unfreezing" experience, in which the adults are helped to be able to look at themselves more objectively and free their minds from preconceptions. Many of the diagnostic procedures and structured exercises described in Chapter 11 help to serve this purpose.

Readiness to Learn

It is well accepted in our culture now that children learn best those things that are necessary for them to know in order to advance from one phase of development to the next. These have been dubbed "developmental tasks" by developmental psychologists:

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks.6

Each of these developmental tasks produces a "readiness to learn" which at its peak presents a "teachable moment." For example, parents now generally accept the fact that they cannot teach children to walk until they have mastered the art of crawling, their leg muscles are strong enough, and they have become frustrated at not being able to stand up and walk the way everybody else does. At that point, and only then, are they able to learn to walk; for it has become their developmental task.

Recent research suggests that the same phenomenon is at work during the adult years. Adults, too, have their phases of growth and resulting developmental tasks, readinesses to learn, and teachable moments. But whereas the developmental tasks of youth tend to be the products primarily of physiological and mental maturation, those of the adult years are the products primarily of the evolution of social roles. Robert J. Havighurst, one of the pioneers in this area of research, divides the adult years into three phases—"early adulthood," "middle age," and "later maturity"—and identifies ten social roles of adulthood: worker, mate, parent, homemaker, son or daughter of aging parents, citizen, friend, organization member, religious affiliate, and user of leisure time. The requirements for performing each of these social roles change, according to Havighurst, as we move through the three phases of adult life, thereby setting up changing developmental tasks and, therefore, changing readiness to learn.

For example, in a person's role of worker, the first developmental task is to get a job. At that point individuals are ready to learn anything required to get a job, but they definitely are not ready to study supervision. Having landed a job, they are faced with the task of mastering it so that they will not get fired from it; and at that point they are ready to learn the special skills it requires, the standards that are expected, and how to get along with fellow workers. Having become secure in a basic job, the next task becomes one of working up the occupational ladder. Now they become ready to learn to become a supervisor or executive. Finally, after reaching their ceiling, they face the task of dissolving the role of worker-and to learn about retirement or substitutes for work.

Robert J. Havighurst, Developmental Tasks and Education (New York: David McKay Co., 1961), p. 2. By

Havighurst illustrates the changes in developmental tasks during the three periods of adult life as follows:

Early Adulthood (ages 18 to 30):

- -Selecting a mate
- -Learning to live with a marriage partner
- -Starting a family
- -Rearing children
- -Managing a home
- -Getting started in an occupation
- -Taking on civic responsibility
- -Finding a congenial social group

Middle Age (ages 30 to 55):

- -Achieving adult civic and social responsibility
- -Establishing and maintaining an economic standard of living
- Assisting teenage children to become responsible and happy adults
- -Developing adult leisure-time activities
- -Relating to one's spouse as a person
- -Accepting and adjusting to the physiological changes of middle age
- -Adjusting to aging parents

Later Maturity (ages 55 and over):

- -Adjusting to decreasing physical strength and health
- -Adjusting to retirement and reduced income
- -Adjusting to the death of a spouse
- -Establishing an explicit affiliation with one's age group
- -Meeting social and civic obligations
- -Establishing satisfactory physical living arrangements7

As Havighurst concludes, "People do not launch themselves into adulthood with the momentum of their childhood and youth and simply coast along to old age. . . . Adulthood has its transition points and its crises. It is a *developmental period* in almost as complete a sense as childhood and adolescence are developmental periods."

Since Havighurst's foundational work on developmental tasks, a number of other investigations of the life stages, transitions, passages, crises, and transformations of the adult years have been published; they are listed in the suggested readings at the end of this chapter. I have included my own list of "Life Tasks of American Adults" in Appendix C. The chief value of these lists for the adult-educational practitioner is to stimulate ideas as to what adults at different stages of development are ready to learn. But one word of caution about them: most of the lists are based on studies of middle-class Americans.

Implications for Practice

At least two sets of implications for practice flow from this difference in readiness to learn:

1. The timing of learnings. If the teachable moment for particular adults to acquire a given learning is to be captured, it is obvious that the sequence of the curriculum must be timed so as to be in step with their developmental tasks. This is the appropriate

⁷lbid., pp. 72-98.

^aRobert J. Havighurst and Betty Orr, Adult Education and Adult Needs (Boston: Center for the Study of Liberal Education for Adults, 1956), p. 1.

the three periods

organizing principle for an adult-education program, rather than the logic of the subject matter or the needs of the sponsoring institution. For instance, an orientation program for new workers would not start with the history and philosophy of the corporation, but rather with real-life concerns of new workers: Where will I be working? With whom will I be working? What will be expected of me? How do people dress in this company? What is the time schedule? To whom can I go for help?

There have been some classic examples of the consequences of violating this organizing principle. One was the introduction of courses on supervision in trade schools, nursing schools, and other preservice vocational programs after World War II, when there was a great shortage of experienced supervisors. The courses were plagued with absenteeism, flunk-outs, and drop-outs—simply because it was not yet a developmental task of people who have not become secure about doing a job themselves to learn how to supervise others in doing the job. Other examples of failure of programs resulting from violation of the readiness-to-learn principle are the several attempts by corporations and at least one national social agency to institute programs on "preparation for retirement" that are geared to people in their forties. Almost universally these programs have resulted in low enrollment, for the simple reason that people whose eyes are still set on going up the occupational ladder are not ready to invest energy in studying how to get off the ladder.

The grouping of learners. The concept of developmental tasks provides some guidance regarding the grouping of learners. For some kinds of learnings homogeneous groups according to developmental task are more effective. For instance, in a program on child care, young parents would have quite a different set of interests from the parents of adolescent children. For other kinds of learnings, heterogeneous groups would clearly be preferable. For instance, in a program of human-relations training in which the objective is to help people learn to get along better with all kinds of people, it would be important for the groups to cut across occupational, age, status, sex, and perhaps other characteristics that make people different. In my own practice, I have adopted the policy of making provision in the design of any adult-learning activity for a variety of subgroups so as to give the students a flexibility of choice; and I find that they quickly discover colleagues with similar developmental tasks.

Orientation to Learning

Adults enter into education with a different time perspective from children, which in turn produces a difference in the way they view learning. Children tend to have a perspective of postponed application on most of their learning. For example, most of what I learned in elementary school I learned in order to be able to get into high school; and most of what I learned there I learned to prepare me for college; and most of what I learned in college I hoped would prepare me for a happy and productive adult life. To a child, education is essentially a process of the accumulation of a reservoir of subject matter-knowledge and skills-that might be useful later in life. Children tend, therefore, to enter any educational activity in a subject-centered frame

Adults, on the other hand, tend to have a perspective of immediacy of application toward most of their learning. They engage in learning largely in response to pressures they feel from their current life situation. To adults, education is a process of improving their ability to cope with life problems they face now. They tend, therefore, to enter an educational activity in a problem-centered or performance-centered frame of mind.

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Implications for Practice

Several implications for practice flow from this difference in orientation to learning.

1. The orientation of adult educators. Just as adults have a different orientation to learning from that of children, so it would seem to follow that a different orientation toward learning is required on the part of educators of adults from the orientation traditionally inculcated in educators of children. Where youth educators can, perhaps appropriately, be primarily concerned with the logical development of subject matter and its articulation from grade to grade according to levels of complexity, adult educators must be primarily attuned to the existential concerns of the individuals and institutions they serve and be able to develop learning experiences that will be articulated with these concerns.

2. The organization of the curriculum. The original basis of organization for the curriculum of youth education was the seven subjects—the trivium (grammar, rhetoric, and logic) and quadrivium (arithmetic, music, geometry, and astronomy) of the medieval schools. Although the number of subjects has proliferated since the Middle Ages, the subject-matter concept of curricular organization still remains relatively intact. But with the emergence of the insights of andragogy the curriculum—which, incidentally, in adult education is increasingly referred to as "program"-of adult education is coming to look less and less like the curriculum of youth education.

Because adult learners tend to be problem-centered in their orientation to learning, the appropriate organizing principle for sequences of adult learning is problem areas, not subjects. For example, instead of offering courses on "Composition I" and "Composition II," with the first focusing on grammar and the second on writing style, andragogical practice would put in their place "Writing Better Business Letters" and "Writing Short Stories." In the adult courses, matters of grammar and style would be treated in the context of the practical concerns of the learners. Even the broad curricular categories used to describe what adults study have departed from the traditional categories of the academic disciplines. In the Handbook for Adult Education, for example, such labels were given to the "Program Areas" as "Education for Family Life," "Education for Social and Public Responsibility," and then "Education for Self-Fulfillment."9

3. The design of learning experiences. The problem-orientation of the learners implies that the most appropriate starting point for every learning experience is the problems and concerns that the adults have on their minds as they enter. Whereas the opening session of a youth-education activity might be titled "What This Course Is All About," in an adult-educational activity it would more appropriately be titled "What Are You Hoping to Get Out of This Course?" Early in the session there would be a problem census or a diagnostic exercise through which the participants would identify the specific problems they want to be able to deal with more adequately. This is not to suggest that a good adult-learning experience ends with the problems the learners are aware of in the beginning, but that is where it starts. There may be other problems that the teacher or institution expects to be dealt with, and these are put into the picture along with the students' problems for negotiation between teacher and students.

⁹R. M. Smith, George Aker, and J. R. Kidd, Handbook of Adult Education (New York: Macmillan, 1970).

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Some Other Assumptions about Learning and Teaching

The critical element in any adult-education program is, of course, what happens when a teacher comes face-to-face with a group of learners. As I see it, the andragogical approach to the learning-teaching transaction is premised on three additional assumptions about learning and teaching:

 Adults can learn. The central proposition on which the entire adult-education movement is based is that adults can learn. One of the great moments in the history of the movement occurred at the annual meeting of the American Association for Adult Education held in Cleveland in 1927, when Edward L. Thorndike reported for the first time his findings that the ability to learn declined only very slowly and very slightly after age twenty. Until that moment adult educators had based their whole work on blind faith, in direct opposition to the prevailing belief that "you can't teach an old dog new tricks." But now their faith had been vindicated; there was scientific proof that adults can learn.

Actually, Thorndike's early studies did seem to indicate a decline in learning capacity of about 1 percent per year after age twenty-five. But later studies, especially those of Thorndike's colleague Irving Lorge, revealed that what declined was the speed of learning, not intellectual power-and that even this decline was likely to be minimized by continued use of the intellect.

The research to date of adult learning clearly indicates that the basic ability to learn remains essentially unimpaired throughout the life span and that therefore, if individuals do not actually perform as well in learning situations as they could, the cause must be sought in such factors as the following:

-Adults who have been away from systematic education for some time may underestimate their ability to learn, and this lack of confidence may prevent them from applying themselves wholly.

-Various physiological changes occur in the process of aging, such as decline in visual acuity, reduction in speed of reaction, and lowering of energy levels, which operate as barriers to learning unless compensated for by such devices as louder sound, larger printing, and slower pace.

-Adults respond less readily to external sanctions for learning (such as grades) than to internal motivation.

2. Learning is an internal process. In our inherited folk wisdom there has been a tendency to look upon education as the transmittal of information, to see learning as an almost exclusively intellectual process consisting of the storing of accumulated facts in the filing drawers of the mind. The implicit assumption underlying this view of learning is that it is essentially an external process in the sense that what the student learns is determined primarily by outside forces, such as the excellence of the teacher's presentation, the quality of reading materials, and the effectiveness of school discipline. People holding this view even today insist that teachers' qualifications be judged only by their mastery of subject matter and clamor against their wasting time learning about the psychology of learning. For all practical purposes this view defines the function of the teacher as being to teach subject matter, not students.

A growing body of research into what really happens when learning takes place has put this traditional conception of learning in serious jeopardy. Although there is not yet agreement on the precise nature of the learning process (in fact there are many theories which seem to explain different parts of it), there is agreement that it is an internal process controlled by the learners and engaging their whole being—including intellectual, emotional, and physiological functions. Learning is described psychologically as a process of need-meeting and goal-striving by the learners. This is to say that individuals are motivated to engage in learning to the extent that they feel a need to learn and perceive a personal goal that learning will help to achieve; and they will invest their energy in making use of available resources (including teachers and readings) to the extent that they perceive them as being relevant to their needs and goals.

The central dynamic of the learning process is thus perceived to be the experience of the learners; experience being defined as the interaction between individuals and their environment. The quality and amount of learning is therefore clearly influenced by the quality and amount of interaction between the learners and their environment and by the educative potency of the environment. The art of teaching is essentially the management of these two key variables in the learning process—environment and interaction—which together define the substance of the basic unit of learning, a "learning experience." The critical function of the teacher, therefore, is to create a rich environment from which students can extract learning and then to guide

their interaction with it so as to optimize their learning from it.

The important implication for adult-education practice of the fact that learning is an internal process is that those methods and techniques which involve the individual most deeply in self-directed inquiry will produce the greatest learning. This principle of ego-involvement lies at the heart of the adult educator's art. In fact, the main thrust of modern adult-educational technology is in the direction of inventing techniques for involving adults in ever-deeper processes of self-diagnosis of their own needs for continued learning, in formulating their own objectives for learning, in sharing responsibility for designing and carrying out their learning activities, and in evaluating their progress toward their objectives. The truly artistic teachers of adults perceive the locus of responsibility for learning to be in the learner; they conscientiously suppress their own compulsion to teach what they know students ought to learn in favor of helping students learn for themselves what they want to learn. I have described this faith in the ability of individuals to learn for themselves as the "theological foundation" of adult education, and I believe that without this faith a teacher of adults is more likely to hinder than to facilitate learning. This is not to suggest that teachers have less responsibility in the learning-teaching transaction, but only that their responsibility lies less in giving ready-made answers to predetermined questions and more in being ingenious in finding better ways to help students discover the important questions and the answers for themselves.

One of the clearest statements of this insight about adult learning was made in 1926 by the great American pioneer adult-education theorist, Eduard C. Lindeman:

I am conceiving adult education in terms of a new technique for learning, a technique as essential to the college graduate as to the unlettered manual worker. It represents a process by which the adult learns to become aware of and to evaluate his experience. To do this he cannot begin by studying "subjects" in the hope that some day this information will be useful. On the contrary, he begins by giving attention to situations in which he finds himself, to problems which include obstacles to his self-fulfillment. Facts and information from the differentiated spheres of knowledge are used, not for the purpose of accumulation, but because of need in solving problems. In this process the teacher finds a new function. He is no longer the oracle who speaks from the platform of authority, but rather the guide, the pointer-out who also participates in learning in proportion to the vitality and relevancy of his facts and experiences. In short, my conception of adult education is this: a cooperative venture in nonauthori-

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tarian, informal learning, the chief purpose of which is to discover the meaning of experience; a quest of the mind which digs down to the roots of the preconceptions which formulate our conduct; a technique of learning for adults which makes education coterminous with life and hence elevates living itself to the level of adventurous

There are superior conditions of learning and principles of teaching. It is becoming increasingly clear from the growing body of knowledge about the processes of adult learning that there are certain conditions of learning that are more conducive to growth and development than others. These superior conditions seem to be produced by practices in the learning-teaching transaction that adhere to certain superior principles of teaching as identified below:

Conditions of Learning

The learners feel a need to learn.

The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences.

The learners perceive the goals of a learning experience to be their goals.

The learners accept a share of the responsibility for planning and operating a learning experience, and therefore have a feeling of commitment toward it.

Principles of Teaching

 The teacher exposes the learners to new possibilities for self-fulfillment.

2) The teacher helps the learners clarify their own aspirations for improved behavior.

3) The teacher helps the learners diagnose the gap between their aspirations and their present level of performance.

4) The teacher helps the learners identify the life problems they experience because of the gaps in their personal equipment.

5) The teacher provides physical conditions that are comfortable (as to seating, smoking, temperature, ventilation, lighting, decoration) and conducive to interaction (preferably, no person sitting behind another person).

6) The teacher accepts the learners as persons of worth and respects their feelings and ideas.

7) The teacher seeks to build relationships of mutual trust and helpfulness among the learners by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness.

8) The teacher exposes his or her own feelings and contributes resources as a colearner in the spirit

of mutual inquiry.

9) The teacher involves the learners in a mutual process of formulating learning objectives in which the needs of the learners of the institution, of the teacher, of the subject matter, and of the society are taken into account.

10) The teacher shares his or her thinking about options available in the designing of learning experiences and the selection of materials and methods and involves the learners in deciding among these options jointly.

¹⁰Robert Gessner (ed.), The Democratic Man: Selected Writings of Eduard C. Lindeman (Boston: Beacon Press, 1956), p. 160. By permission.

Conditions of Learning

The learners participate actively in the learning process.

The learning process is related to and makes use of the experience of the learners.

The learners have a sense of progress toward their goals.

Principles of Teaching

11) The teacher helps the learners to organize themselves (project groups, learning-teaching teams, independent study, etc.) to share responsibility in the process of mutual inquiry.

12) The teacher helps the learners exploit their own experiences as resources for learning through the use of such techniques as discussion, role playing, case method, etc.

13) The teacher gears the presentation of his or her own resources to the levels of experience of particular learners.

14) The teacher helps the learners to apply new learnings to their experience, and thus to make the learnings more meaningful and integrated.

15) The teacher involves the learners in developing mutually acceptable criteria and methods for measuring progress toward the learning objectives.

16) The teacher helps the learners develop and apply procedures for self-evaluation according to these criteria.

Some Implications for Youth Education

The differences between children and adults are not so much real differences, I believe, as differences in assumptions about them that are made in traditional pedagogy. Actually, in my observation (and retrospection), the children start fairly early to see themselves as being self-directing in broadening areas of their lives; they start accumulating experience that has increasing value for learning; they start preparing for social roles (such as through part-time jobs) and therefore experiencing adultlike readinesses to learn; and they encounter life problems for which they would like some learnings for immediate application. Therefore, many of the principles of andragogy have direct relevance to the education of children and youth.

The fact is that many of the new developments in the curricula of our elementary and secondary schools have some of the flavor of andragogy. The "new math," "new biology," and linguistics programs start with the concerns of the students and engage them in a process of largely self-directed discovery. Some of the products of today's schools who become adults in the 1980s and 1990s will, therefore, presumably be better equipped to continue a process of lifelong learning than are today's adults.

But these developments are quite piecemeal, and the practitioners have lagged far behind the curriculum theorists in helping students learn how to learn rather than just teaching them what they "ought" to know. What is required, if youth education is to produce adults who are capable of engaging in a lifelong process of continuing self-development, is a whole new set of assumptions about the purpose of youth education and a new technology to carry out that purpose. I can foresee that the result would be a more andragogical approach to the education of children and youth. As my contribution toward movement in this direction I am presenting in Appendix D a schema I prepared for UNESCO, "Toward a Model of Lifelong Education."

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The Andragogical Process of Program Development

When the principles of andragogy are translated into a process for planning and operating educational programs, that process turns out to be quite different from the curriculum planning and teaching processes traditionally employed in youth education. The rest of this book is concerned with describing this process as it applies to the planning of comprehensive programs of adult education (Chapters 5 through 10) and to the management of specific learning experiences (Chapter 11).

As I see it, this andragogical process involves the following phases consistently in both levels of application (total programs and individual learning activities):

The establishment of a climate conducive to adult learning;

The creation of an organizational structure for participative planning;

3) The diagnosis of needs for learning;

4) The formulation of directions of learning (objectives);

5) The development of a design of activities;

The operation of the activities;

7) The rediagnosis of needs for learning (evaluation).

How Do We Know That It Is Better?

People frequently ask me what research has been done vis-à-vis the andragogical model that supports the proposition that it is superior to the pedagogical model. My automatic-reflex response is, "That is not the question; nobody-at least, not I-is saying that."

This kind of question arises from a curious disease that seems to be endemic in the world of learning theory. It might be called panacea-addiction. Philosophers call it either-or thinking. It is a compulsion for neat, simple, single solutions to complex

problems.

As I said in an earlier chapter, I have the impression that many traditional teachers (and learning theorists, for that matter) have an almost ideological attachment to the pedagogical model. It is something they have to be loyal to, enforce with sanctions (like normative grading), and protect from heresy. I don't see andragogy as an ideology at all, but a system of assumptions about learners that needs to be tested out for different learners in different situations. In a sense, it is a system that encompasses the pedagogical model, since it makes legitimate the application of pedagogical strategies in those situations in which the assumptions of the pedagogical model are realistic.

The appropriate question to ask, I think, is "What research has been done to indicate under what conditions the andragogical model is appropriate, in whole or in part?" And to satisfy the curiosity of those of you who are asking that question, I am including in Appendix E a list of the papers, research reports, books, and experiments

regarding andragogy that I know about.